

Title: Non-Medical Prescription Pain Reliever Use as a Risk Factor for Suicidal Ideation

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Introduction:

More than 13% of Americans age 12 and over have used prescription pain relievers non-medically at least once during their lifetime (Substance Abuse and Mental Health Administration, 2012). Though often associated with substance abuse, research finds that the degree of non-medical prescription opioid use may additionally indicate severity of user depression, as users with mild to severe depression and no substance abuse history are 1.9 to 3.1 times more likely to misuse prescription opioids than the general population (Grattan, Sullivan, Saunders, Campbell, & Von Korff, 2012). Given the role of depressed mood as a risk factor for suicide (APA; American Psychiatric Association, 2013), non-medical prescription pain reliever use may indicate suicidal risk with underlying depression serving as mediator.

Participants and Procedure:

Participants were adults aged 18 and older who participated in the 2011 National Survey on Drug Use and Health (NSDUH). Descriptive and logistic regression analyses were conducted to test the relationship between lifetime non-medical use of pain relievers and recent suicidal ideation. Demographic variables included in the model were biological sex, race/ethnicity, and marital status. The SPSS complex sampling module in SPSS was used to account for NSDUH's sampling design.

Results:

In this representative sample, 13.9% of participants reported that they had used pain relievers non-medically at some time in their life. In addition, 3.7% of the sample reported "seriously thinking about killing themselves" in the past year. Logistic regression was conducted adjusting for demographic variables to test the link between nonmedical use of prescription drugs and suicidal ideation. Results were statistically significant, Wald $F(11, 50)$ (sampling design degrees of freedom) = 31.28, $p < .001$ and explained between 1.4% (Cox and Snell) and 5.0% (Nagelkerke) of the variance in suicidal ideation. Women had greater odds of suicidal ideation (O.R. = 1.28). Compared to non-Hispanic Whites, African American (O.R. = .70) and Hispanic (O.R. = .59) participants had lower odds of suicidal ideation and Native American (3.22) participants had greater odds of suicidal ideation. Participants who were never married (O.R. = 2.25) or divorced (O.R. = 1.94) also had greater odds of suicidal ideation compared to their married counterparts. Finally, central to the proposed research question, non-medical use of pain relievers increased the odds of past year suicidal ideation (O.R. = 2.36).

Conclusion:

Non-medical use of pain relievers increased risk for suicidal ideation. Though non-medical pain reliever use may be a way of coping with depression, it may also be increasing feelings of

depression. That is, depressed mood can result from repeated opioid intoxication and withdrawal (APA, 2013). Another potential reason for this link is chronic pain, as it increases the risk of suicide attempt two to three times beyond the general population (Tang & Crane, 2006). Some use pain relievers non-medically to self-medicate chronic pain, as not all misuse derives from substance abuse or depression. Related to chronic pain is opioid-induced hyperalgesia, a paradoxically increased sensitivity to pain due to prolonged prescription opioid use (Hay et al., 2009) that may heighten suicidal risk.